

## ABSTRACT OF THE DISCLOSURE

In a vehicle power supply system including a battery, an inverter unit for converting DC electric power of the battery into AC electric power and supplying it to a rotating electric machine to drive it, an AC wiring line for connecting the rotating electric machine and the inverter unit, and a DC wiring line for connecting the inverter unit and the battery, the inverter unit is placed in a vicinity of the battery so that the DC wiring line becomes shorter than the AC wiring line. By this, a voltage drop due to the DC wiring line is reduced, and a torque characteristic of the rotating electric machine can be improved.